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| APPLICATION NO.   | FILING DATE        | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|--------------------|--------------------------|---------------------|------------------|
| 10/698,772  | 10/31/2003         | Deia Salah-Eldin Bayoumi | ABDT-0574/B030260   | 1826             |
| 23361<br>ABB INC.<br>LEGAL DEPARTMENT-4U6<br>29801 EUCLID AVENUE<br>WICKLIFFE, OH 44092 | 7550<br>08/04/2008 |                          |                     |                  |
| EXAMINER  |                    |                          |                     |                  |
| PARKER, BRANDI P  |                    |                          |                     |                  |
| ART UNIT  |                    | PAPER NUMBER             |                     |                  |
| 3623  |                    |                          |                     |                  |
| MAIL DATE   |                    | DELIVERY MODE            |                     |                  |
| 08/04/2008  |                    | PAPER                    |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/698,772

**Applicant(s)**

BAYOUMI ET AL.

**Examiner**

BRANDI P. PARKER

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/12/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Acknowledgements***

1. This is a non-final office action in response to applicant's amendment filed on May 12, 2008.
2. Claims 1-20 are pending in this Office Action.

### ***Response to Applicant's Remarks***

3. Applicant remarks to the initial Office Action are that
  - a. Agrusa et al does not determine whether a first manufacturing machine is unavailable to perform a job and reassigning the job to a second manufacturing machine;
  - b. Agrusa et al does not require a database including characteristics of a plurality of manufacturing machines.

Examiner was persuaded by Applicant's remarks, however, the arguments are now moot in view of the new grounds of rejection and the new art applied to Applicant's claims.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

6. In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter.

7. Claim 1 is directed towards reassigning jobs in a manufacturing system. As the claims are not sufficiently tied to an apparatus, such as a computer, the claimed method is non-statutory and therefore rejected under 35 U.S.C. 101.

8. Claims 2-12 are rejected for being rejected upon dependent claim 1.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 4-9, 13-14, 16, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Lai et al (US 6407680).

11. With respect to claims 1, 6, 8-9 and 13, Lai teaches:

c. receiving status data relating to a first machine scheduled to perform a job (column/line 16/12-20);

d. determining whether the status data indicates the first machine is unavailable to perform the job (column/line 16/12-20);

e. and if the status data indicates the first machine is unavailable, identifying a second machine operable to perform the job, and reassigning the job from the first machine to the second machine (column/line 16/12-20).

12. Regarding claim 4, Lai teaches the method of claim 1, wherein determining whether the status data indicates the first machine is unavailable comprises querying a database to determine a meaning for the status data (column/line 15/61-16/8, regarding the resource manager communicating with each machine running to determine the status of each machine in the database).

13. Regarding claims 5 and 16, Lai teaches the method of claim 1 or 13, wherein querying the database to identify a second machine comprises querying to identify a machine having substantially same capabilities as the first machine (column/line 15/44-51, regarding determining which machines support the necessary utilities for performing the required task).

14. As to claim 7 and 19, Lai teaches:

f. a database comprising data regarding the characteristics of a plurality of machines (column/line 15/39-51, regarding machine farm with available machines capable of performing the required task); and

g. a server communicatively coupled to said database, said server adapted to receive notification that a first machine is unavailable to perform a job scheduled to be performed by the first machine, query said database to identify a second machine available to perform the job, and reschedule the job to be performed by the second machine (column/line 16/12-29, regarding resource manager that monitors and assigns task to capable and available machines).

15. Regarding claim 14 and 20, Lai teaches the system of claim 19, further comprising a scheduling and planning agent communicatively coupled to said server, wherein said server reschedules the job to be performed by the second manufacturing machine by transmitting a request to reschedule the job to said scheduling and planning agent (column/line 16/12-29, regarding resource manager that monitors and assigns task to capable and available machines).

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 2-3, 10-12, 15 and 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai et al (US 6407680) in view of Agrusa et al (US 2004/0024891).

18. As to claim 2, 3, 15, 18 Lai teaches the method of claim 1 and receiving task status data for a particular machine (column/line 16/12-20). Lai does not explicitly teach receiving status data indicating that the first machine is malfunctioning. Agrusa discloses a system that receives status data relating to a first machine comprises receiving data indicating the first machine is malfunctioning (paragraph 0049, regarding when the primary machine becomes unavailable due to internal malfunctions). Since each individual element and its function are shown in the prior art, albeit shown in separate references, the difference between the claimed subject matter and the prior art rests not on any individual element or function, but in the very combination itself, that is in the substitution of the machine task status of Lai for the machine malfunction status of Agrusa. Thus, the simple substitution of one known element for another producing a predictable result renders the claim obvious.

19. With respect to claims 10-12 and 17, Lai teaches reassigning tasks from one machine to another based on availability (column/line 16/12-20). Lai does not directly teach reassigning the job from the second machine back to the first machine comprises by transmitting instructions to schedule the job for performance at the first manufacturing machine and updating a corresponding schedule. However, the system in Lai reassigns the task or job to any available machine. A predictable result of the



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system in Lai would be to reassign particular tasks back to the first machine when the second machine becomes unavailable. Therefore, it would have been obvious to one with ordinary skill in the art to reassign the job or task back to the first machine whenever the first machine becomes available again and the second machine becomes unavailable.

### ***Conclusion***

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDI P. PARKER whose telephone number is (571) 272-9796. The examiner can normally be reached on Mon-Thurs. 8-5pm.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRANDI P PARKER/  
Examiner, Art Unit 3623

/Andre Boyce/  
Primary Examiner, Art Unit 3623